

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

<u>General Public Utility Nuclear Corporation</u>)	DOCKET 50-219
)	Movement of Heavy
)	Loads At Full Power
<u>Oyster Creek Nuclear Generating Station</u>)	

**NUCLEAR INFORMATION AND RESOURCE SERVICE REQUEST FOR A
HEARING AND PETITION TO INTERVENE IN GENERAL PUBLIC UTILITY
NUCLEAR LICENSE AMENDMENT REQUEST FOR OYSTER CREEK
NUCLEAR GENERATING STATION**

I. INTRODUCTION

Pursuant to 10 CFR 2.714, petitioner Nuclear Information and Resource Service (NIRS) hereby request a hearing and leave to intervene in the license amendment proceeding for General Public Utility Nuclear (GPUN) proposal to revise the technical specifications for Oyster Creek nuclear generating station (OCGNS) concerning the movement of heavy loads up to 45 tons during full power operation utilizing the reactor building crane.

64 Federal Register 195 (October 8, 1999)

II. REQUEST FOR A HEARING AND PETITION FOR LEAVE TO INTERVENE

A. NUCLEAR INFORMATION AND RESOURCE SERVICE HAS STANDING.

In any proceeding for the issuance or amendment of an operating license for a nuclear power station, Section 189(a) of the Atomic Energy Act guarantees as a right a hearing "to any person whose interests may be affected" by the licensing action. 42 U.S.C.

2239(a). The right to intervene under Section 189(a) is governed by "contemporaneous judicial concepts of standing," i.e., whether (1) the action being challenged could cause injury-in-fact to the petitioner, and (2) such injury is arguably within the zone of interest protected by the Atomic Energy Act or the National Environment Policy Act ("NEPA")

Vermont Yankee Nuclear Power Station (Vermont Yankee Nuclear Power Station), LBP-90-6-31 NRC 85, 89 (1990) citing Portland General Electric Co. (Pebble Springs Nuclear Power Plant, Units 1 and 2), CLI-76-27, 4 NRC 610, 613-14 (1976).

NIRS is entitled to intervene in this proceeding on behalf of its members living near the power station who would be injured by an accident cause by the inadequate or unsafe movement of heavy loads at full power operation at the Oyster Creek nuclear generating station in Toms River, New Jersey.

1. The Petitioner Will Suffer Injury-In-Fact as a Result of the Proposed License Amendment

The petitioner has standing to intervene on behalf of its members, who would suffer injury-in-fact by implementation of the proposed license amendment that is inadequate to protect their health and safety and the health of the environment in so much that it: 1) would increase the probability of an accident; 2) creates the possibility of an accident not previously identified in the Safety Analysis Report and; 3) constitutes a significant reduction in the margin of safety at an operating boiling water reactor.

The petitioner Nuclear Information and Resource Service (NIRS) is a non-profit tax exempt organization established in 1978 of individuals and groups concerned about our nation's energy and environmental future. A number of these groups and members of NIRS are located by work and residence within the OCNGS emergency planning zone. NIRS has focused considerable attention on OCNGS including public education events in Lacey and Berkley Township area and filings to the NRC under 10 CFR 2.206 with regards to conditions at the nuclear power station affecting public health and safety. NIRS continues to initiate and respond to media events and inquiries arising out of OCNGS operations. NIRS has provided expert witness before the New Jersey Department of Environmental Protection with regards to issues of public health and safety affected by the OCNGS emergency plan.

Additionally, NIRS was granted standing during a previously filed Petition To Intervene before the Atomic Safety and Licensing Board in the GPUN's OCNGS License Amendment process pertaining to the movement of heavy loads over irradiated fuel. 61 Federal Register 20842 (May 8, 1996)

Joyce Kuschwara and William deCamp, Jr. are NIRS members who live, recreate, and work within the close vicinity of OCNGS. As discussed in the attached affidavits of William deCamp, Jr. and Joyce Kuschwara, their health and safety and quality of their environment would be adversely affected by the reduction in the margin of safety and increased risk of a heavy load drop associated with the amendment sought by OCNGS for the movement of heavy load at full power operation. The affidavits are concerned that GPUN is proposing a course of activity that is currently prohibited under the reactor's technical specifications. The affidavit(s) demonstrates the petitioner's viable concerns in as much as GPUN has stated that proposed amendment raises the risk that "the potential drop of a load up to 45 tons in magnitude in the equipment hatch, while traversing the 119' elevation of the Reactor Building or in the cask drop protection system may create the possibility of a new or different accident than previously identified." ¹

The petitioner states that a heavy load drop accident involving loads up to 45 tons moved during full power operation without the safety assurances of a single failure proof crane would inflict radiation exposures affecting their health and safety as a result of a heavy load drop accident directly or indirectly damaging reactor safety systems, including safe shutdown functions, and the added risk of rupturing the irradiated fuel pool storage pool liner with an associated loss of fuel pool coolant capability.

Accordingly, the petitioner has demonstrated that they would suffer a direct injury as a result of an accident involving the drop of a heavy load up to 45 tons during

¹ License Amendment Request 251, "Movement of Heavy Loads up to 45 Tons With the Reactor Building Crane During Power Operations," GPUN, OCNG, Docket 50-219, April 28, 1999, page 6.

full power operation crane on systems, structures or components affecting reactor safety, including safe shutdown systems and irradiated fuel pool cooling capability.

2. In The Alternative, The Petitioner Should Be Granted Discretionary Intervention

Even if this tribunal finds that the Petitioner lacks standing to address safety issues involving the movement of heavy loads at full power without a single failure proof crane, the petitioner should be granted discretionary standing.

- a.) The petitioner can and will make a significant contribution to the record of this case (Citing Pebble Springs Nuclear Plants Units 1 and 2). Over the past several years, NIRS has provided extensive contributions to the public record on matters pertaining to the OCNGS potentially affecting public health and safety and environmental quality. NIRS has participated in the filing of petitions under 10 CFR 2.206 with regards to the issues including the material condition of safety-related reactor internal components, fire protection, and design deficiencies in the irradiated fuel pool cooling system.
- b.) The Commission should exercise its discretion to admit NIRS because NIRS was granted standing during a previously filed Petition To Intervene in the OCNGS License Amendment process pertaining to the movement of heavy loads over irradiated fuel. 61 Federal Register 20842 (May 8, 1996).

3. The Petitioner's Concerns Fall Within The Zone of Interest Protected By The Atomic Energy Act and the National Environmental Protection Act.

The petitioner's concerns, as stated in the affidavits and as set forth in this document relate to their health and safety and the preservation of environmental quality. These concerns focus on the GPUN application to conduct an activity currently prohibited that could lead to a heavy load drop directly or indirectly impact reactor safety-related equipment, including safe shutdown systems while at full power and additionally the irradiated fuel pool cooling equipment resulting

in unacceptable off-site radiation doses and consequences affecting the petitioner's health and safety and precluding them from residential, occupational, recreational and environmentally sensitive sites. Thus the petitioner falls within the "zone of interest" protected by the Atomic Energy Act and the National Environmental Policy Act.

B. ASPECTS OF THE PROCEEDING ON WHICH THE PETITIONER SEEKS TO INTERVENE

10 CFR 50.91(a)(1) requires that licensees requesting an amendment provide an analysis "using the standard in 50.92" or the 3 factor test for the issuance of no significant hazards considerations. The petitioner's review of the GPUN application finds that the licensee has submitted a simple line item assertion to address the standards of 50.92 while offering insufficient analysis. The licensee's safety assessment is insufficient in presenting relevant material to the amendment request and omits information and events vital to the amendment's consideration. This issue has previously been addressed in NRC Generic Letter 86-03 "Application for License Amendments" as a basic and recurring problem.

The petitioner will contend that a heavy load drop accident involving loads up to 45 tons being moved at full power operation without the safety assurances provided by a single failure proof crane can indirectly damage safety-related relay switches located throughout the reactor building. As a result of the drop accident, the concussion of the load drop accident impacting reactor building concrete structures can initiate a "chatter" (the rapid uncontrolled opening and closing) within electrical relay switches rendering the safety-related switches and associated safety-related equipment inoperable.

The petitioner will contend that the GPUN proposed change to allow movement of a heavy load up to 45 tons without the safety assurances offered with a single failure proof crane over safe shutdown systems and the spent fuel pool and allowing

movement while the reactor is at full power is inadequate to protect public health and safety and environmental quality in so much as:

- 1) represents a significant increase in the probability of an accident;
- 2) creates the possibility of an accident not previously identified in the Safety Analysis Report and;
- 3) constitutes a significant reduction in the margin of safety at an operating boiling water reactor.

The petitioner concerns are based on the following documents:

1) The Nuclear Regulatory Commission prepared and issued NRC Bulletin-96-02 "Movement of Heavy Loads Over Spent Fuel, Over Fuel in the Reactor Core or Over Safety-Related Equipment," dated April 11, 1996, raising the concerns of unreviewed safety issues associated with specific activities conducted by the licensees moving heavy loads. Bulletin 96-02 requires licensees with plans to move heavy loads over safety-related equipment while the reactor is at power and which involve a potential load drop accident that has not previously been evaluated in the FSAR must submit a license amendment request for staff to review.

2) NRC NUREG-0612 "Control of Heavy Loads at Nuclear Power Stations" specifies in "Guidelines For Control of Heavy Loads" under Recommended Guidelines in Section IV. "Damage to equipment in redundant or dual safe shutdown paths, based on calculations assuming the accidental dropping of a postulated heavy load, will be limited so as not to result in loss of required safe shutdown functions."

NUREG-0612 defines a safe load travel path and procedures and operator training to assure to the extent practical that heavy loads are not carried over or near irradiated fuel or safe shutdown equipment. However, heavy loads may be carried over non-safety related equipment. The petitioner is additionally concerned that under the present

definition the heavy load path may include OCNCS irradiated fuel pool cooling equipment that is categorized as non-safety related equipment.

As identified in NUREG-0612 review of single failure proof cranes, OCNCS does not rely on single failure proof cranes but solely on heavy load paths.

3) General Public Utility Nuclear License Amendment Request No. 251 for Oyster Creek nuclear generating station dated April 28, 1999 requesting approval to handle loads up to and including 45 tons using the reactor building crane during power operations. License Amendment Request No. 251 states that "the proposed amendment may create the possibility of an accident different than those previously considered."

The request states that "This request does not include loads containing spent fuel assemblies" and that the specified loads will "not travel over spent fuel."

However, License Amendment Request No. 251 states "the potential drop of a load up to 45 tons in magnitude in the equipment hatch, while traversing the 119' elevation of the Reactor Building or in the cask drop protection system may create the possibility of a new or different accident than previously identified."

License Amendment Request No. 251 states "The only load, considered under this amendment, that will travel over the spent fuel pool involves a Radwaste Shipping Cask (RWSC)."

License Amendment Request No. 251 states "The probability of a load drop is dependent on the reliability of the handling system and operator training." Additionally, the amendment request that "procedural controls and training have also been upgraded."

4) NRC document dated September 24, 1999 from Mr. A Randolph Blough, Director, Division of Reactor Projects, to Mr. Michael B Roche, Vice President and Director, GPU Nuclear, Inc. references the NRC Region 1 Field Office of the NRC

Office of Investigations which determined "Specifically, a certification check off sheet for a Level 2 Station Services Helper indicated that the helper had successfully completed Reactor Building crane training during an April 2, 1998, training session, when the individual had not received training on the operation of the crane." The petitioner is concerned that this document contradicts assertions made by GPUN License Amendment No. 251 certifying upgraded building crane operator training which would improve the reliability of the reactor building crane and its handling system. [ATTACHMENT A]

5) NRC Daily Event Report, Event No. 35701, dated May 11, 1999 for Prairie Island nuclear power station Unit 1, while performing a heavy load lift over an open fueled reactor vessel, the station went outside its design basis. The upper internals, which constituted a "heavy load," were transported over the open reactor vessel which contained fuel while the containment purge system was operating. The Updated Final Safety Analysis Report (UFSAR) states that during heavy load lifts over open fueled reactor vessel, at least one isolation valve will be closed in each line penetrating the containment atmosphere to the outside. Therefore, the unit was placed Outside Design Basis by the failure of operators to adhere to the proper safety procedures. This recent heavy load movement event demonstrates how reactor operators fail to recognize operating procedures and jeopardize public safety. [ATTACHMENT B]

6) NRC Weekly Information Report for October 15, 1999 with regard to Comanche Peak Steam Electric Station Unit 1. NRC reported that on October 6, 1999, with the unit in a refueling outage, during a routine lift of a reactor coolant pump motor, a rigging failure resulted in the load dropping approximately 10 feet. No equipment damage occurred; one minor personnel injury occurred during the subsequent evacuation of the containment. The motor was left suspended while the licensee considered remedial action. Following a rigging change, the motor was safely landed. The Comanche Peak accidental heavy load drop documents the petitioner concerns that accidents involving rigging failure of loads have occurred within the recent experience of the nuclear industry. [ATTACHMENT C]

7) NRC Headquarters Daily Report, November 4, 1999 Nebraska Public Power District's Cooper Nuclear Power Station in Brownville, Nebraska, reports that on November 2, 1999, while operators were removing core shroud bolts from the spent fuel pool, a cable clamp on the cable supporting one of the bolts unfastened. The approximately 300 lb. bolt dropped 10 feet and hit a filter canister located on the bottom of the spent fuel pool, penetrating the canister and damaging at least one of the filters. The movement was reported to be conducted in accordance with the licensee's heavy loads procedure which contained administrative controls to prevent moving the bolts over spent fuel. This event documents petitioner's concerns that within recent history licensees conduct activities involving heavy load movement that result in an accidental drop despite administrative controls. [ATTACHMENT D]

III. CONCLUSION

For the foregoing reasons, the Commission should admit the petitioner, NIRS, as an intervenor.

Respectfully Submitted,



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**UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION
BEFORE THE ATOMIC SAFETY AND LICENSING BOARD**

<u>General Public Utility Nuclear Corporation</u>)	Docket 50-219
)	Movement of Heavy Load
<u>Oyster Creek Nuclear Generating Station</u>)	At Full Power

THE CERTIFICATE OF SERVICE

I hereby certify that copies of the Nuclear Information and Resource Service Request for Hearing and Petition to Intervene in General Public Utility Nuclear License Amendment Request for Oyster Creek Nuclear Generating Station have been provided by Facsimile Transmission and/or by U.S. Mail, First Class on this date of November 5, 1999 to the following:

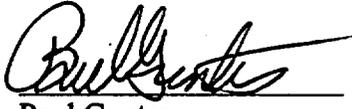
Ms. Annette Viette-Cook
Office of the Secretary
U.S. Nuclear Regulatory Commission
Washington, DC 20555

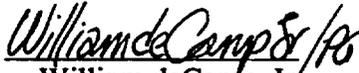
Ms. Ann P. Hodgdon
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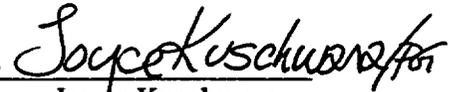
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